

REMARKS

Applicants have carefully reviewed and considered the Office Action.

Currently, claims 1, 3-9, 11, 12 and 15-22 are pending in the present application, and claims 1 and 15 are independent. Claims 15-22 have been withdrawn. No amendments have been made by way of the present submission, thus, no new matter has been added. Additionally, no new issues have been raised which would require additional search and/or consideration on the part of the Examiner. In the event that the present submission does not place the application into condition for allowance, entry thereof is respectfully requested as placing the application into better form for appeal.

Reconsideration and withdrawal of the rejection are respectfully requested in view of the following remarks.

CLAIM REJECTION - 35 U.S.C. §103(a)

Claims 1, 3-9 and 11-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Satoi et al. (US 6,331,384, hereinafter Satoi '384) and Fairbairn et al. (US 6,176,667, hereinafter Fairbairn '667).

Applicants traverse the rejection for at least the following reasons.

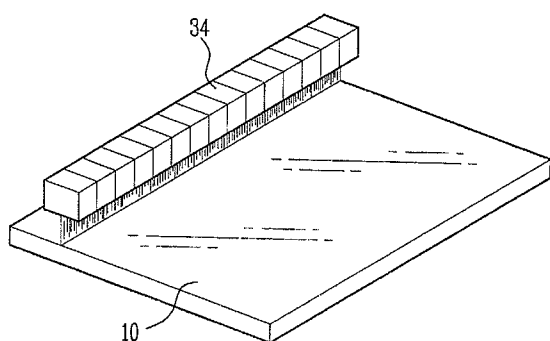
Independent claim 1 of the present invention recites **a device usable for forming an alignment layer** of a display apparatus, the device comprising: a printing part to print an alignment layer on a substrate; **a drying part positioned vertically above the printing part to dry the alignment layer printed on the substrate**; a transferring part including a transfer robot to transfer the substrate from the printing part to the drying part by elevating the substrate; and at least one inkjet head to spray an alignment material and thereby print the alignment layer onto the substrate and being positioned vertically between the printing part and the drying part (emphasis added).

However, Satoi '384 and Fairbairn '667 fail to disclose or teach the features recited in claim 1 of the present invention. Particularly, Satoi '384 and Fairbairn '667 fail to disclose or

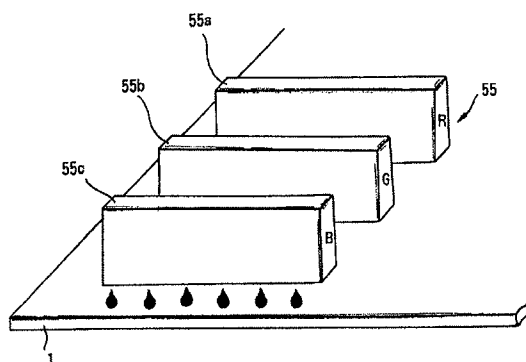
teach ‘the drying part positioned directly and vertically above the printing part to dry the printed alignment layer’ of the present invention.

Satoi ‘384 does not disclose or suggest the above technical features of the present invention as acknowledged by the Examiner in the Office Action at page 6(e). Also, at page 6(f)-(g) of the Office Action, the Examiner asserts that Fairbairn ‘667 teaches the stacking process chambers A1, A2 so that it would be obvious to a person having ordinary skill in the art at the time the invention was made to have modified the apparatus of Satoi ‘384 by adding the teaching of Fairbairn ‘667 to stack the portions of the apparatus.

However, the present invention relates to a device usable for **forming an alignment layer** (emphasis added). In contrast, Satoi ‘384 relates to a device usable for forming a color filter. For example, the inkjet head 34 of one embodiment of the present invention has the same width as that of a substrate to form the alignment on an entire substrate. On the contrary, three inkjet heads 55a, 55b, 55c of Satoi ‘384 has a width smaller than that of a substrate to form the color filter R, G, B in each sub pixel. See the below comparative Figs.



[Fig. 6 of the Present Invention]



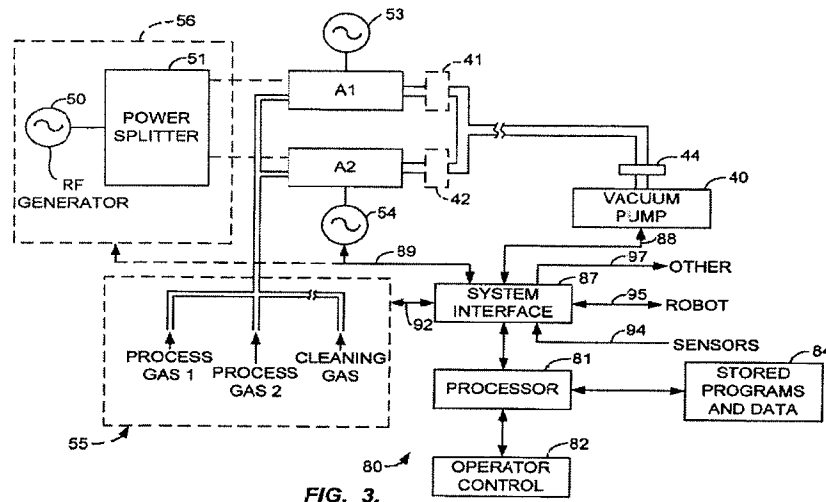
[Satoi ‘384]

That is, elements of a device differ according to the layer formed on the substrate. Therefore, Satoi ‘384 directed to forming the color filter is different from the present invention.

Fairbairn '667 does not disclose or suggest an alignment relationship between the drying part and the printing part although Fairbairn '667 discloses the two chambered aligned vertically. However, Fairbairn '667 does not suggest or teach what the stacked chambers are.

The vertically aligned chambers A1, A2 of Fairbairn '667 are used to perform deposition or etching process as disclosed in col. 3 lines 22-28 of Fairbairn '667. **However**, the vertically aligned parts of the present invention are used to perform **printing and drying processes**.

Likewise, process gases 1 or/and 2 of Fairbairn '667 are provided to the two chambers A1, A2 through the same pipe. The two chambers A1, A2 of Fairbairn '667 share the process gases at the same time as disclosed in col. 5 lines 10-11 and below Fig. 3 of Fairbairn '667.



In other words, these two chambers A1, A2 of Fairbairn '667 perform the same process. Therefore, Fairbairn '667 cannot perform different processes at the same time. **However**, the vertically aligned parts of the present invention **performs different processes** from each other so that the vertically aligned parts can perform different processes at the same time.

As discussed above, the present invention is not rendered obvious to a person having ordinary skill in the art at the time the invention was made to have modified the apparatus of Satoi '384 by adding the teaching of Fairbairn '667 to stack the portions of the apparatus.

Further, if there are multiple elements recited in the claim, the invention must be judged as an organically combined whole, and the elements will likely not be considered individually as

inventions per se. Accordingly, it is respectfully submitted that it is unlikely that such invention will be regarded as lacking in inventive step simply due to the fact that the claimed element(s) partially consists of the applied references.

Accordingly, independent claim 1 of the present invention is patentably distinguishable from Satoi '384 and Fairbairn '667, whether taken singly or in combination.

Claims 3-9 and 11-12 depending from base claim 1 are also allowable for the reasons discussed above with respect to base claim 1, as well as on their own merits.

Accordingly, the Examiner is respectfully requested to withdraw the rejection and pass this application to issue.

CONCLUSION

In view of the foregoing, Applicants believe that this application is now in condition for allowance and therefore requests favorable consideration and prompt allowance of the pending claims.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong Reg. No. 40,953 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

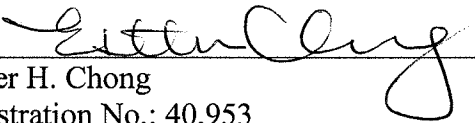
Application No. 10/687,776
Amendment dated July 22, 2009
After Final Office Action of April 22, 2009

Docket No.: 0465-0990P

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: July 22, 2009

Respectfully submitted,

By 
Esther H. Chong
Registration No.: 40,953
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant